

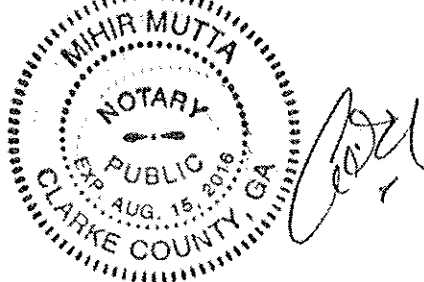
**VERMONT AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
CERTIFICATION & INDEPENDENT ASSURANCE UNIT**

TYPE "D" RECORD OF CERTIFICATION FROM MANUFACTURER

NAME OF MANUFACTURER: SKAPS Industries.
ADDRESS: 335 Athena Dr. Athens, Georgia 30601 (USA).
WE HEREBY CERTIFY: Geotextile Under Stone Fill
IN THE QUANTITY OF: 1400 Sq. Yd.
(Plan Quantity)
FURNISHED BY: RENAUD BROTHERS.
(Contractor or Supplier)
FOR USE ON: 0325 MARLBORO BRP 010-1(43)
IDENTIFIED BY: 801 Roll#600087439, 040531452, 600087443.

CONFORMS TO ALL REQUIREMENTS OF THE STATE OF VERMONT AGENCY OF TRANSPORTATION 2011 STANDARD SPECIFICATIONS, PERTINENT PROJECT PLAN, AND SPECIAL PROVISIONS FOR THE ABOVE STATED CONTRACT FOR ITEM OR ITEMS LISTED AS FOLLOWS: 649.31 AND THAT PROCESSING, PRODUCT TESTING AND INSPECTION CONTROL OF RAW MATERIALS ARE IN CONFORMITY WITH ALL APPLICABLE SPECIFICATIONS, DRAWINGS AND/OR STANDARDS OF ALL MATERIALS FURNISHED.

Subscribed and sworn to before me



Notary
Commission Expiring

By:
Signature of Authorized Personnel

A handwritten signature in black ink, appearing to read "Palak Patel".

Name: **PALAK PATEL**
(Type or Print)

Title: **Quality Control Manager**
(Company Status or Title)

CERTIFICATIONS FOR MATERIALS REQUIRING A TYPE "C" OR "D" CERTIFICATION, WHEN SPECIFIED BY CONTRACT PROVISIONS, MUST BE ACCOMPANIED BY MILL TEST REPORTS SHOWING CHEMICAL AND PHYSICAL ANALYSIS.

THIS CERTIFICATION IS TO BE COMPLETED BY THE MANUFACTURER OF THE MATERIALS AND NOT BY THE SUPPLIER OR DEALER. THIS CERTIFICATION IS TO BE SENT TO:

Vermont Agency of Transportation

TA 562
Rev 02/03

**Materials & Research Section
National Life Bldg. Drawer 33
Montpelier, Vermont 05633**



SKAPS Industries (Nonwoven Division)
335, Athena Drive
Athens, GA 30601 (U.S.A.)
Phone (706) 354-3700 Fax (706) 354-3737
E-mail: info@skaps.com

Sales Office:
Engineered Synthetic Product Inc.
Phone: (770)564-1857
Fax: (770)564-1818

May 29, 2014
Advanced Drainage Systems
4640 Trueman Blvd.
Hilliard, OH, 43026

Dear Sir/Madam:

This is to certify that SKAPS GT180 is a high quality needle-punched nonwoven geotextile made of 100% polypropylene staple fibers, randomly networked to form a high strength dimensionally stable fabric. SKAPS GT180 resists ultraviolet deterioration, rotting, biological degradation. The fabric is inert to commonly encountered soil chemicals. Polypropylene is stable within a pH range of 2 to 13. SKAPS GT180 conforms to the property values listed below:

PROPERTY	TEST METHOD	UNITS	M.A.R.V. Minimum Average Roll Value
Grab Tensile	ASTM D 4632	lbs (kN)	205 (0.91)
Grab Elongation	ASTM D 4632	%	50
Trapezoidal Tear	ASTM D 4533	lbs (kN)	85 (0.38)
CBR Puncture	ASTM D 6241	lbs (kN)	535 (2.38)
Permittivity*	ASTM D 4491	sec ⁻¹	1.35
Water Flow*	ASTM D 4491	gpm/ft ² (l/min/m ²)	90 (3667)
AOS*	ASTM D 4751	US Sieve (mm)	80 (0.18)
UV Resistance	ASTM D 4355	%/hrs	70/500

Notes:

* At the time of manufacturing. Handling may change these properties.

PALAK PATEL
QUALITY CONTROL MANAGER

www.skaps.com

www.espsynthetic.com

Product : GT180-180

ROLL # ASTM METHOD UNITS TARGET	MD TENSILE D4632 lbs. 205	MD ELONG D4632 % 50	XMD TENSILE D4632 lbs 205	XMD ELONG D4632 % 50	MD TRAP D4533 lbs. 85	XMD TRAP D4533 lbs 85	CBR PUNCTURE D6241 lbs. 535	AOS D4751 US Sieve 80	WATER FLOW D4491 gpm/ft ² 90	PERMITTIVITY D4491 sec ⁻¹ 1.35
600087439	250	69	251	88	113	150	743	80	106	1.42
600087443	252	70	267	92	121	153	730	80	103	1.38
040531452	255	64	211	90	98	129	670	80	101	1.35

* All values are MARV.